Geometry Honors Problem Sets

Intersections of points, lines and planes 2

1. Name a plane that contains .

2. Name a plane that contains  but that is not shown

in the diagram.

3. Name the intersection of plane DCFE and plane ABCD.

4. Name four lines shown in the diagram that don’t intersect

plane EFGH.

5. Name two lines that are not shown in the diagram and that

don’t intersect plane EFGH.

6. Name three planes that don’t intersect  and don’t contain 

State whether it is possible for the figures described below to exist.

7. Two points both lie in each of two lines.

8. Three points all lie in each of two planes.

9. Three noncollinear points all lie in each of two planes.

10. Two points lie in a plane X, two other points lie in a different plane Y, and the four

points are coplanar but not collinear.

Points R, S, and T are noncollinear points contained in plane X.

11. Suppose that P is any point of  other than R and S. Does point P lie in plane X?

Explain.